

9-5

Study Guide and Intervention

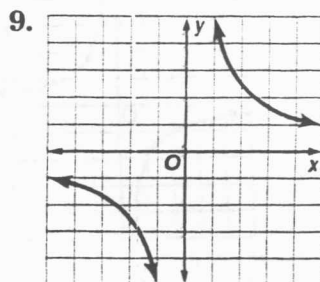
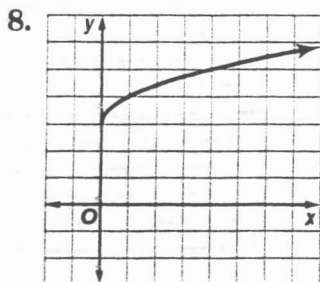
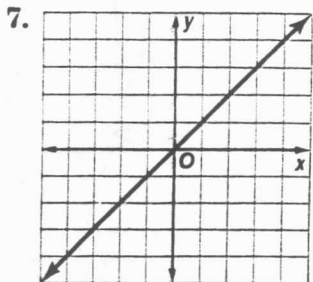
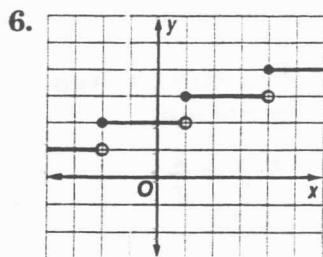
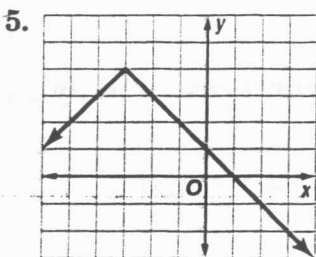
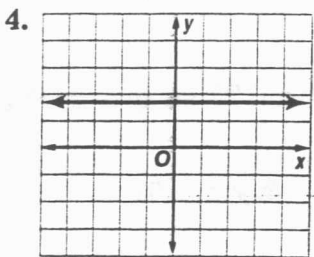
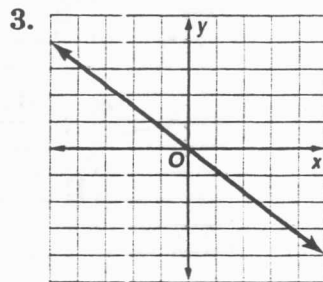
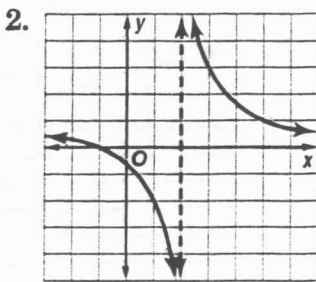
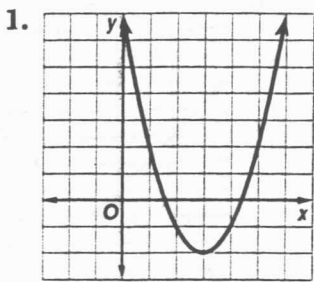
Classes of Functions

Identify Graphs You should be familiar with the graphs of the following functions.

Function	Description of Graph
Constant	a horizontal line that crosses the y -axis at a
Direct Variation	a line that passes through the origin and is neither horizontal nor vertical
Identity	a line that passes through the point (a, a) , where a is any real number
Greatest Integer	a step function
Absolute Value	V-shaped graph
Quadratic	a parabola
Square Root	a curve that starts at a point and curves in only one direction
Rational	a graph with one or more asymptotes and/or holes
Inverse Variation	a graph with 2 curved branches and 2 asymptotes, $x = 0$ and $y = 0$ (special case of rational function)

Exercises

Identify the function represented by each graph.

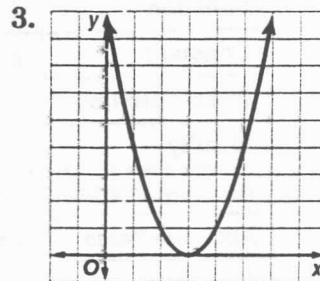
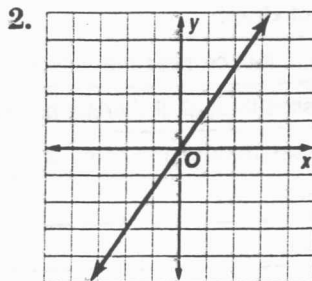
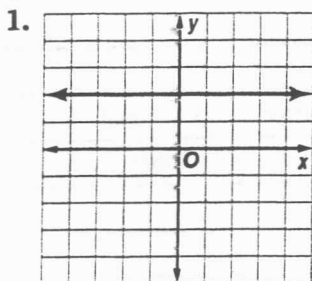


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Skills Practice

Classes of Functions

Identify the type of function represented by each graph.



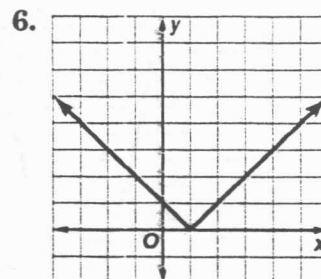
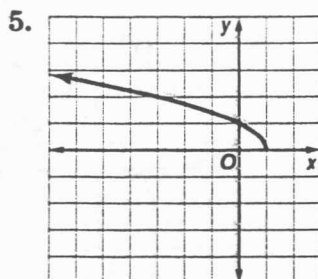
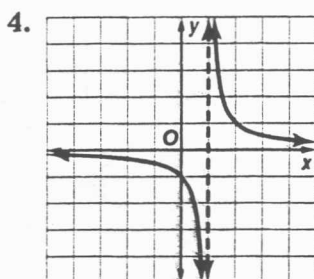
Match each graph with an equation below.

A. $y = |x - 1|$

B. $y = \frac{1}{x - 1}$

C. $y = \sqrt{1 - x}$

D. $y = \lfloor x \rfloor - 1$



Identify the type of function represented by each equation. Then graph the equation.

7. $y = \frac{2}{x}$

8. $y = 2\lfloor x \rfloor$

9. $y = -3x$

